

Seawolf-class submarine

The ***Seawolf* class** is a class of nuclear-powered fast attack submarines (SSN) in service with the United States Navy. The class was the intended successor to the *Los Angeles* class. Design work began in 1983.^[5] At one time, an intended fleet of 29 submarines was to be built over a ten-year period, later reduced to twelve submarines. The end of the Cold War and budget constraints led to the cancellation in 1995 of any further additions to the fleet, leaving the *Seawolf* class limited to just three boats. This, in turn, led to the design of the smaller *Virginia* class. The *Seawolf* class cost about \$3 billion per unit (\$3.5 billion for *USS Jimmy Carter*) making it the most expensive SSN submarine and second most expensive submarine ever after the French SSBN *Triomphant* class.

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Design

The *Seawolf* design was intended to combat the threat of large numbers of advanced Soviet Navy ballistic missile submarines such as the *Typhoon* class and attack submarines such as the *Akula* class in a deep ocean environment. *Seawolf*-class hulls are constructed from HY-100 steel, which is stronger than the HY-80 steel employed in previous classes, in order to withstand water pressure at greater depths.^{[6][7]}

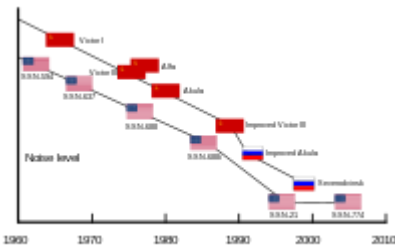
Compared to previous *Los Angeles*-class submarines, *Seawolf* submarines are larger, faster, and significantly quieter; they also carry more weapons and have twice as many torpedo tubes, for a total of eight. The boats are able to carry up to 50 UGM-109 Tomahawk cruise missiles for attacking land and sea

Seawolf class



USS Seawolf (SSN-21) underway.

Class overview	
Builders:	General Dynamics Electric Boat
Operators:	 United States Navy
Preceded by:	<i>Los Angeles</i> class
Succeeded by:	<i>Virginia</i> class
Cost:	\$3 billion per unit (equivalent to \$5 billion in 2018) ^[1]
Built:	1989–2005
In commission:	1997–present
Planned:	29
Completed:	3



Acoustic stealth comparison

surface targets. The boats also have extensive equipment to allow shallow water operations. The class uses the more advanced ARCI Modified AN/BSY-2 combat system, which includes a new, larger spherical sonar array, a wide aperture array (WAA), and a new towed-array sonar.^[8] Each boat is powered by a single S6W nuclear reactor, delivering 45,000 hp (34 MW) to a low-noise pump-jet.

As a result of their advanced design, however, *Seawolf* submarines were much more expensive. The projected cost for twelve submarines of this class was \$33.6 billion, but after the Cold War ended, construction was stopped at three boats.^[9]

Variants

USS *Jimmy Carter* is roughly 100 feet (30 m) longer than the other two boats of her class due to the insertion of a section known as the Multi-Mission Platform (MMP), which allows launch and recovery of ROVs and SEALs.^[10] The MMP may also be used as an underwater splicing chamber for tapping of undersea fiber optic cables. This role was formerly filled by the decommissioned USS *Parche*. *Jimmy Carter* was modified for this role by General Dynamics Electric Boat at the cost of \$887 million.^[11]

Boats

Name	Builder	Laid Down	Launched	Commissioned	Fate
Seawolf subgroup					
<i>Seawolf</i>	General Dynamics Electric Boat, Groton	25 October 1989	24 June 1995	19 July 1997	Active in service
<i>Connecticut</i>		14 September 1992	1 September 1997	11 December 1998	Active in service
Jimmy Carter subgroup					
<i>Jimmy Carter</i>	General Dynamics Electric Boat, Groton	5 December 1998	13 May 2004	19 February 2005	Active in service

Cancelled:	26
Active:	3
General characteristics	
Type:	Nuclear attack submarine
Displacement:	Surfaced: 8,600 tons Submerged: 9,138 tons, 12,139 tons full, USS Jimmy Carter ^[2]
Length:	353 ft (108 m)
Beam:	40 ft (12 m)
Propulsion:	1 S6W PWR 45,000 hp (34 MW) 1 secondary propulsion submerged motor 1 shaft 1 pump-jet propeller
Speed:	20 knots (37 km/h) (silent) ^[3] 35 knots (65 km/h) (maximum) ^[3]
Range:	unlimited
Endurance:	Only limited by food supplies
Test depth:	1,600 ft (490 m) ^[4]
Complement:	140
Crew:	14 officers; 126 enlisted
Armament:	8 × 660 mm torpedo tubes (50 Tomahawk land attack missile/Harpoon anti-ship missile/Mk 48 guided torpedo)

See also

- List of submarine classes of the United States Navy
- List of submarines of the United States Navy
- List of submarine classes in service
- Submarines in the United States Navy
- Cruise missile submarine
- Attack submarine



Seawolf-class SSN Profile

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